The newest addition to the annual MICROBIOLOGY series,

MICROBIOLOGY-

1982 puts into focus

puts into focus exciting new work in

the following major areas of microbiological research:

CELL—CELL INTERACTIONS IN PATHOGENESIS

Bacterial Adhesion in Pathogenesis

- Introduction
- Autochthonous Populations
- Role of Surface Proteins Involved in Surface Adhesion
- Role of Surface Polysaccharides in Bacterial Adhesion
- Variable Surface Factors in Bacterial Adhesion

The Macrophage in Host Defense

Cell Surface Receptors Involved in the Immune System

COMPARATIVE MOLECULAR BIOLOGY

Streptococcal Genetics

- Conjugation
- Transformation, Transduction, and Bacteriophage
- Drug Resistance
- Genetics and Physiology
- Metabolic and Bacteriocin-Related Plasmids
- Development and Use of Recombinant DNA Technology

Bacillus subtilis Chromosome

- Structure and Modification
- Molecular Cloning

As usual in this well-established series, these extended abstracts are carefully selected for their importance to the development of the knowledge base in each of these areas. The book will be particularly useful in research laboratories and institutional libraries.

Bibliographic and Ordering Information

Editor: David Schlessinger.

July 1982, 400 pages, clothbound. \$15.00 to ASM members; \$25.00 to others. Please note that ASM members must remit payment with order. Orders from outside the United States and Canada must be prepaid before shipment. Prices are subject to change without notice. ISBN: 0-914826-42-5. Standing orders to the series are welcome.

Previous volumes in the series, which started publication in 1975 with the volume entitled Microbiology — 1974, are still available in limited quantities. Prices for each preceding volume are \$15.00 for ASM members and \$25.00 for others.

Published and distributed by:

American Society for Microbiology

Publications Office 1913 I Street, NW Washington, DC 20006



State-of-the-art technology in clinical microbiology

RAPID METHODS and AUTOMATION in Microbiology

EDITOR: Richard C. Tilton

This new collection of research papers on a topic of increasing and critical interest promises to be of real assistance to clinical microbiologists, clinical pathologists, immunologists, medical technologists, and others who are caught up in the rapidly changing environment of microbiology. The speed of publication lends added utility to this survey of technologically advanced—and advancing—methods and procedures. The book, indeed, captures some of the excitement that was in the air at the meeting in May 1981 on which this volume is based: the Third International Symposium on Rapid Methods and Automation in Microbiology.

As the keynote seminar of the symposium suggested, topics of particular concern include systems approaches, evaluation, and the future of diagnostic systems in microbiology. The book fully develops the following areas:

- Computer Systems in Clinical Microbiology
- Rapid Detection of Microorganisms in Body Fluids
- Hydrophobic Grid-Membrane Microbiology
- Rapid Reporting in Microbiology
- Immunological Diagnosis of Infectious Diseases
- Chromatographic Analysis: a New Future for Clinical Microbiology
- Rapid Detection of Microorganisms in Urine
- Rapid Methods in Food Microbiology
- Systems Approaches to Diagnostic Microbiology
- Rapid Identification of Viral, Chlamydial, and Mycoplasmal Agents
- Rapid Identification of Clinically Important Anaerobes
- Applications of the Autobac System
- Clinical and Research Applications of the MS-2 System
- Nonautomated Rapid Methods in Microbiology

ORDERING INFORMATION:

February 1982. 361 pages. Clothbound. \$30.00. ISBN: 0-914826-38-7 Price subject to change without notice. *Order from the publisher.*

AMERICAN SOCIETY for MICROBIOLOGY

Publication Sales, 1913 I Street, NW / Washington, DC 20006

The most recent advances in spore science—

SPORULATION and GERMINATION

/ EDITORS: HILLEL LEVINSON A. L. SONENSHEIN DONALD J. TIPPER

Proceedings of the Eighth International Spore Conference Woods Hole, Massachusetts, 9–12 October 1980

This book contains two kinds of papers—review articles and research papers—and reflects the high quality of the Conference, at which advances in the applications of modern molecular genetics and biochemistry to persistent questions regarding sporulation and germination were presented.

The review articles, listed below, are authoritative, up-to-date, critical reviews of major areas written by leaders in their respective fields:

- Initiation of Bacterial Sporulation. Ernst Freese
- Biochemistry of Bacterial Forespore Development and Spore Germination.
 Peter Setlow
- Advances in the Genetics of Bacillus subtilis Differentiation. P. J. Piggot, A. Moir, and D. A. Smith
- Cloning Strategies in Bacillus subtilis. Paul S. Lovett
- Sigma Factors, Stage 0 Genes, and Sporulation. Richard Losick
- Toxins of Sporeforming Bacteria. Robert E. Andrews, Jr., and Lee A. Bulla, Jr.
- Biophysical Studies on the Molecular Mechanisms of Spore Heat Resistance and Dormancy. W. G. Murrell.

The research papers are refereed and reflect the most recent advances in spore science, including material in molecular genetics and gene cloning. Well-documented experiments on important and interesting topics—52 in all—are arranged in the following six major topic areas:

- Genetics of Sporeforming Bacteria and Cloning of Sporulation Genes
- Initiation of Sporulation and Regulation of Metabolism
- Macromolecular Synthesis During Sporulation
- Dormancy, Germination, and Outgrowth
- Resistance of Spores
- Resting Forms of Microorganisms Other than Bacillus and Clostridium.

SPORULATION AND GERMINATION will be of particular interest in graduate and undergraduate departments of microbiology, university libraries, medical school libraries, and industrial laboratories, as a handy reference for all individuals involved in spore research, and as adjunct material for teaching courses that cover spore science.

ORDERING INFORMATION

Publication Date: July 1981: ISBN: 0-914826-35-2; 316 pages, clothbound, \$25.00 (\$17.00 to members of ASM, who must remit payment with order. Limit of three copies at member price.)



Published and distributed by:

American Society for Microbiology

1913 I Street, NW • Washington, DC 20006

An event that the scientific world welcomes:

Publication of

Current Chemotherapy and Immunotherapy

EDITORS: Piero Periti and Giuliana Gialdroni Grassi PUBLISHER: American Society for Microbiology



Proceedings of the 12th International Congress of Chemotherapy



CURRENT CHEMOTHERAPY AND IMMUNOTHERAPY marks the outcome of the 12th ICC, a scientific meeting which is characterized by the excitement of new ideas and the presence of leading scientists from around the world. The two-volume book is remarkable, not only because it captures so vividly, by using extended abstracts, the essential content of the scientific information exchanged in Florence, but also because of the rapidity with which the material has been made available to scientists not fortunate enough to attend the meeting.

This compendium of information covers antimicrobial, anticancer, and antiviral chemotherapy, as well as immunology and immunotherapy. Papers are divided into the following sections:

- Antimicrobial Agents
- Antiviral Agents
- Interferon
- Immunology
- Anticancer Chemotherapy

The two-volume set of meticulously edited, fully indexed books should be in every library with collections in chemotherapy, pharmacology, pharmaceutical sciences, cancer research, immunology, immunotherapy, antimicrobial agents, and medical microbiology. In addition, individual scientists whose work requires up-to-date knowledge of recent developments in current chemotherapy and immunotherapy will find this publication invaluable.

ORDERING INFORMATION

July 1982. 1,606 pages, in two clothbound volumes, sold only as a set. ISBN: 0-914826-39-5. \$90.00 (\$50.00 to members of the American Society for Microbiology, who must remit with order.) Please note that all orders from outside the United States must be prepaid in US dollars. Prices are subject to change without notice.

Order your copy from the publisher:

AMERICAN SOCIETY for MICROBIOLOGY

Publication Sales 1913 I Street, NW Washington, DC 20006



Your search for details ends here

New 4th Edition!

CLINICAL ASPECTS OF IMMUNOLOGY

Edited by **P.J. Lachmann**, F.R.C.P., F.R.C.Path. and **D.K. Peters**, F.R.C.P.; with 83 contributors.

Acclaimed under the editorship of Gell and Coombs, this new edition:

- continues as the internationally-respected, definitive work on the interrelationship of basic immunology to clinical medicine
- "... is a vital addition to the library of all graduates of advanced students of immunology, microbiology, or internal medicine." ANNALS OF INTERNAL MEDI-CINE (on the 3rd ed.)

1982. 2,495 pages in 2 volumes, 262 illustrations. (B-2809-1) Price, \$195.00. A Blackwell Scientific Publication.

NEW!

PRINCIPLES AND PRACTICE OF DISINFECTION, PRESERVATION AND STERILIZATION

Edited by **A.D. Russell,** M.P.S., M.R.C.Path.; **W.B. Hugo**, Ph.D., F.P.S.; and **G.A.J. Ayliffe**, M.D., M.R.C.Path.; with 28 contributors.

- details various types of antimicrobial agents their properties, mechanism of action, and applications
- discusses preservatives in pharmaceuticals, cosmetics, foods, and specialized areas
- covers heat, radiation, gaseous, and filtration sterilization 1982. 653 pages, 106 illustrations. (B-4228-0) Price, \$65.00. A Blackwell Scientific Publication.

NEW

THE EPIDEMIOLOGY OF DISEASES

Edited by **D.L. Miller**, M.D., F.R.C.P., F.F.C.M. and **R.D.T. Farmer**, M.R.C.S., M.R.C.G.P.; with 26 contributors.

- outlines the current epidemiological knowledge of the more common diseases and medical conditions
- emphasizes relevant aspects in the diagnosis and management of disease... as well as understanding their natural history and prevention

1982. Approx. 496 pages, 98 illustrations. (B-3445-8) About \$64.00. A Blackwell Scientific Publication.

New 2nd Edition!

IMMUNOLOGY OF PARASITIC INFECTIONS

Edited by **Sydney Cohen,** M.D., F.R.C.Path., and **Kenneth S. Warren,** M.D.

- covers the complex interactions between parasites and the host immune system
- discusses the development of immunopathology, acquired immunity, and immune evasion by parasites October, 1982. Approx. 900 pages, 80 illustrations. (B-1112-1) About \$76.00. A Blackwell Scientific Publication.



Blackwell Scientific Publications

Save time! Save money! U.S. customers call our 24 hour, 7-day-a-week hotline: **800-345-8501** (In Pennsylvania, call 1-800-662-5180)

AMS224-099

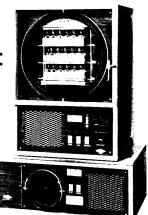
YES! Please send my 30-day on approval copies of: LACHMANN (B-2809-1) Price, \$195.00 RUSSELL (B-4228-0) Price, \$65.00 MILLER (B-3445-8) About \$64.00 COHEN (B-1112-1) About \$76.00	
☐ Bill me	□ Payment Enclosed
☐ MasterCard	□ VISA
#	u unu unua recula
Name	
Address	
City	
State	Zip
For faster handling, mall to: Linda Anderson, The C.V. Mosby Company, 11830 Westline Industrial Dr., St. Louis, MO 63141	
30-day approval good in U.S. and Canada. PRICES SLIGHTLY HIGHER OUTSIDE U.S.A. ALL PRICES ARE SUBJECT TO CHANGE. Add applicable sales tax.	
	AMS224.099.03

VIRTIS ANNOUNCES A NEW WORLD SERIES WITH 65 WINNERS



no.15:

the bench top with big league capability



The brilliant new 6 liter performer benchtop fans have been waiting for! This one takes any VirTis manifold or changeable chamber — like the superb 600SL stoppering set up shown here — and actually lets you bench process with greater precision than most large pharmaceutical production dryers!

SuperSix is also the first benchtop with the exclusive VirTis smooth-sided stainless steel cylindrical condenser that lets you slide out the entire ice plug for quick defrost — a convenience you will never want to be without again. Let us tell you more . . . send for our 48 page full color catalog!

see the whole series-65 superstar performers

WORLD LEADER IN FREEZE DRYING



THE VIRTIS COMPANY, INC. GARDINER, N.Y. 12525